Climatic Data

Climate is an important factor in the processes that affect soil, water, air, plant, and animal resources. Nearly every conservation practice is dependent on weather or climate. NRCS staff and other professionals providing natural resource conservation technical assistance need climatic data to plan, design, and implement conservation measures. The NRCS National Water and Climate Center Field Office Guide to Climatic Data (http://www.wcc.nrcs.usda.gov/water/climate/foguide.html#toc) includes descriptions of the climatic data oriented to the NRCS role in natural resource conservation and provides recommendations on the most appropriate climatic data to use in conservation practice application.

Climatic data provided here is from three primary sources:

1. Rainfall Frequency Data (Michigan 24-Hour Rainfall by County.xls)– This table provides 24-hour rainfall amounts by county for the 2-, 5-, 10-, 25-, 50-, and 100-year frequency storms. This data is consistent with the Michigan Department of Environmental Quality recommendations as described in their October 2001 publication, "Computing Flood Discharges for Small Ungaged Watersheds."

2. Information from NRCS National Water and Climate Center: The Climatic Data Access Network (http://www.wcc.nrcs.usda.gov/water/climate/state.pl?state=mi) was developed to provide climatic data and analysis needed by NRCS and others providing conservation technical assistance. The map-based information for each Michigan county includes:

   WETS (Wetlands Determinations) – The WETS table provides a month-by-month summary and probability analysis of temperature and precipitation. The table also provides average length of growing season using three index temperatures (32, 28, and 24 degrees Fahrenheit) at 50 and 70% probabilities.

   TAPS (Temperature and Precipitation Summary) – The TAPS table provides a month-by-month summary and probability analysis of temperature and precipitation.

   FROST (First and Last Frost Date Analysis) – The FROST table provides information on the average date of the last temperature below 24, 28, and 32 degrees Fahrenheit in the spring, and the average date of the first temperature below 24, 28, and 32 degrees Fahrenheit in the fall, at probabilities of 10, 20, and 50%.

   GROWTH (Growing Season Length) – The GROWTH table provides average length of growing season using three index temperatures (32, 28, and 24 degrees Fahrenheit) at 10, 20, 50, 80, and 90% probabilities.

3. The map-based County Weather Forecast for Michigan (http://www.crh.noaa.gov/grr/nowmap2.htm) provides current weather conditions, a 5-day forecast, and notices of hazardous weather potential from the National Oceanic & Atmospheric Administration (NOAA).